A.D. 1820 . . . . N° 4462.

SPECIFICATION

OF

JOHN BARTON.

PROPELLING VESSELS, CONSTRUCTION OF ENGINES AND BOILERS, &c.

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Propelling Vessels, Construction of Engines and Boilers, &c.

BARTON'S SPECIFICATION.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, John Barton, of Falcon Square, in the City of London, Engineer, send greeting.

WHEREAS His most Excellent Majesty King George the Fourth did, by His Letters Patent under the Great Seal of that part of the United Kingdom of Great Britain and Ireland called England, bearing date at Westminster, the Fifteenth day of May, in the first year of His reign, give and grant unto me, the said John Barton, my ex̃ors, adm̃ors, and assigns, His especial licence, full power, sole privilege and authority, that I, the said John Barton, my ex̃ors, adm̃ors, and assigns, during the term of years therein mentioned, should and lawfully might make, use, exercise, and vend, within England, Wales, and the Town of Berwick upon Tweed, and also in all His Majesty's Colonies and Plantations abroad, my Invention of "Certain Improvements in Propelling, and in the Construction of Engines and Boilers applicable to propelling and other Purposes;" in which said Letters Patent there is contained a proviso that if I, the said John Barton, shall not particularly describe and ascertain the nature of my said Invention, and in what manner the same is to be performed, by an instrument in writing under my hand and seal, and cause the same to be inrolled in His Majesty's High Court of Chancery within six calendar months next and immediately after the date of the said Letters Patent, that then the said Letters Patent, and all liberties and advantages whatsoever thereby granted, shall utterly cease, determine, and become void, as in and by the same, relation being thereunto had, will more fully and at large appear.

NOW KNOW YE, that in compliance with the said proviso, I, the said John Barton, do hereby declare that the nature of my said Invention, and the manner in which the same is to be performed, are particularly described and ascertained in and by the Drawings hereunto annexed, and the following description thereof (that is to say):—

My Invention, as it respects boilers, is in their construction of a strong figure, and to make the flues for the fire and smoke so as to expose a large surface of fire to the fluid, that the heat may have to ascend as much as possible in every part I can, to act against a part of the boiler where there is water adjoining, and of such a shape that they may work without any surrounding brickwork if desired, as shewn in Figure 1, end view, and Figure 2, a side section; *a*, *a*, shews the fire-place; *b*, *b*, shews the form and situation of the flues, which go from the fire-place *a*, *a*, and then ascend into the curved flue *b* 1, from which it returns towards the fire-place to the flue *b* 2, when it returns round the pipe *c* (which is full of water, and divides these two flues, when it goes towards the chimney or pipe *b* 3, where the smoke goes away. Fig. 3 is a side section of part of a pump or engine with a hollow rod, which I claim as my Invention; it answers both for the pump rod and raising main for the water to ascend in the inside of the rod, and is connected at top by a joint or any other method to allow the water to run off. Fig. 4 shews a section of a cock in the cylinder cover of the engine for feeding it with grease, oil, or any other fluid without admitting air; or as at Figure 5, it may be used for feeding an engine with water, as it answers the purpose of a double cock; these may be made to revolve by machinery, so as to give the exact supply required, or it may be made to raise and fall with a float in the boiler, and may be used for various other purposes, and the chamber must be made larger or smaller according to the use intended or quantity of fluid required. Figure 6 shews the cylinder lid, with the cock, Figure 4, shewn on a smaller scale. Fig. 7 shews the end section of my engine for raising water or other purposes, and is well adapted for a fire or a blowing engine, as it works with little friction, and has a tendency to improve by use; it is shewn with the fan or piston, which is metallic, going towards the left, on which side it is forcing the water up, and the upper valve is open on that side, and it forms a vacum on the other side, and shuts the top valve and opens the bottom valve to the suction, so that these valves act alternately, and raise water at the raising and depressing of the handles. Fig. 8 is a plan of segments of the metallic piston or fan, which is pressed against the diameter and ends of the cylinder or working piece of the engine by the dark springs. Figure 9 is an end view of my wheel or drum, made hollow as far as the dotted lines, for propelling

FIG. 1.

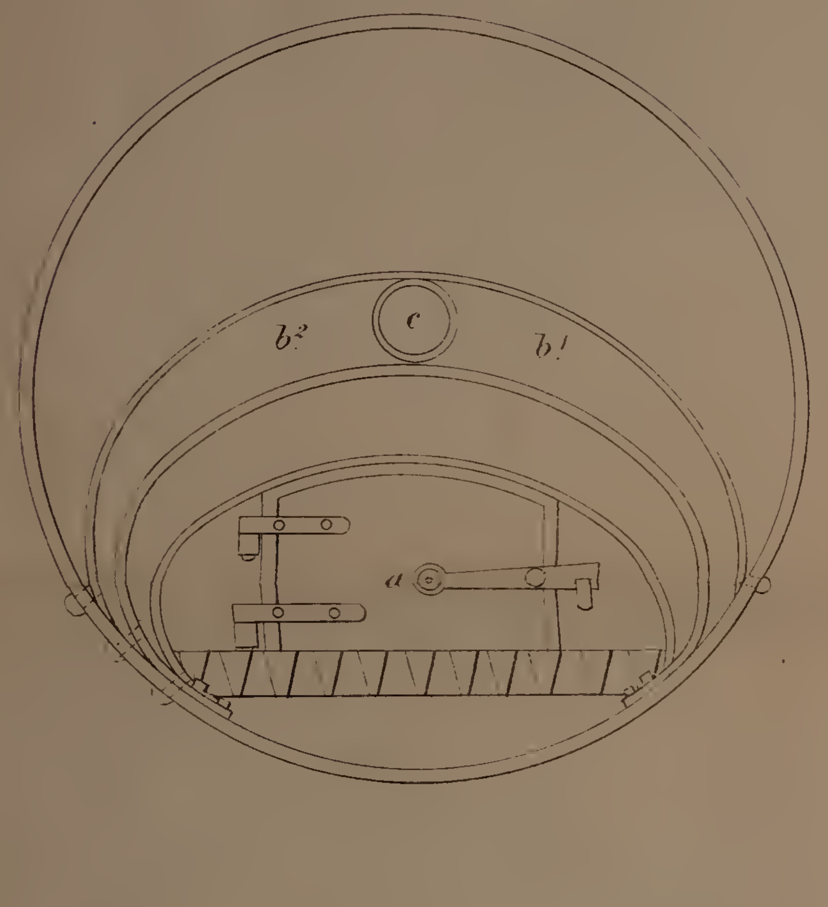


FIG. 2.

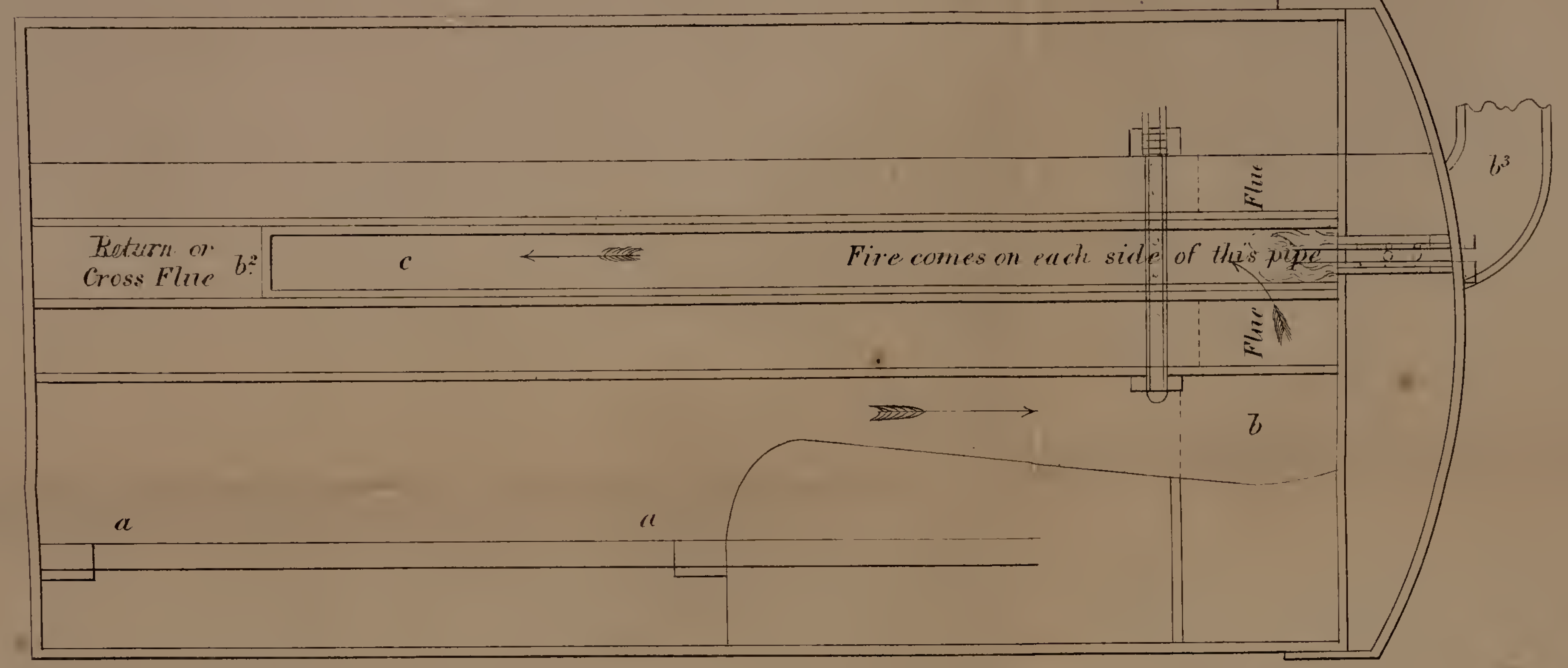


FIG. 3.

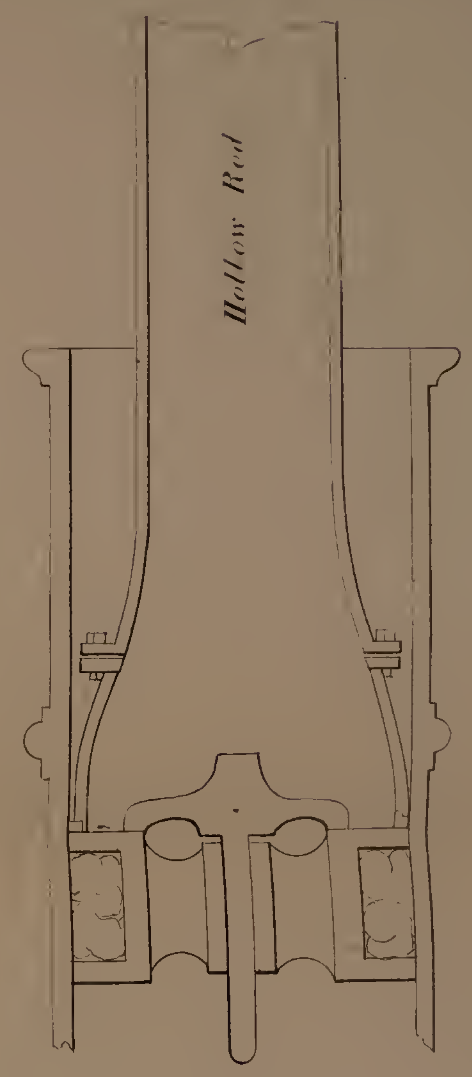


FIG. 4.

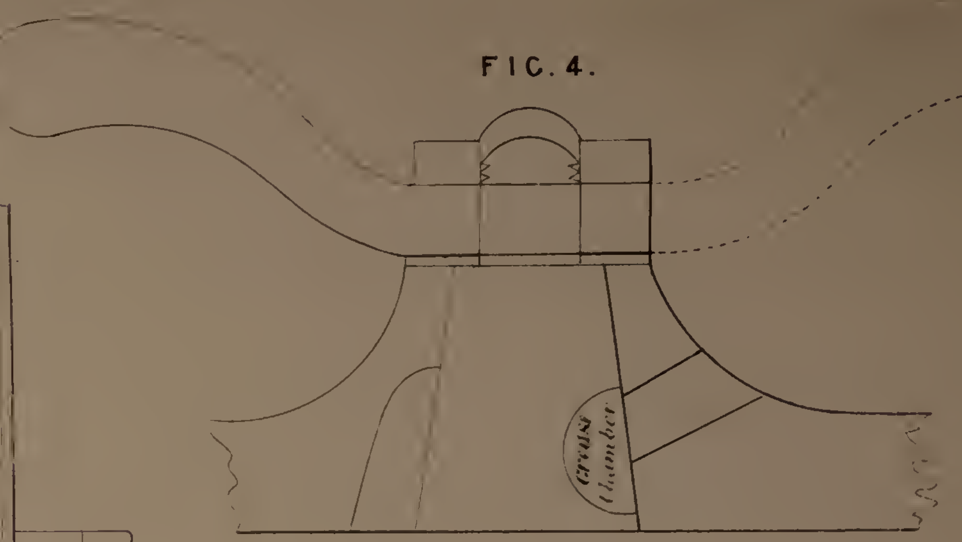


FIG. 5.

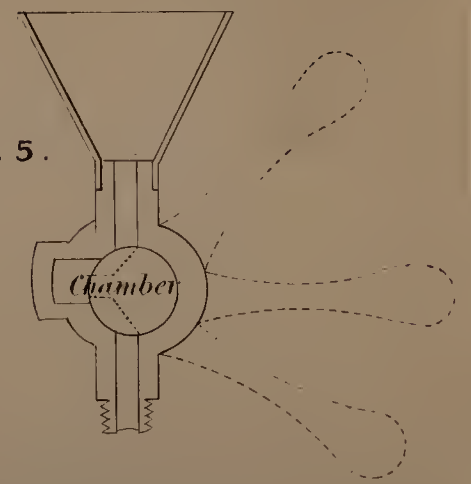


FIG. 6.

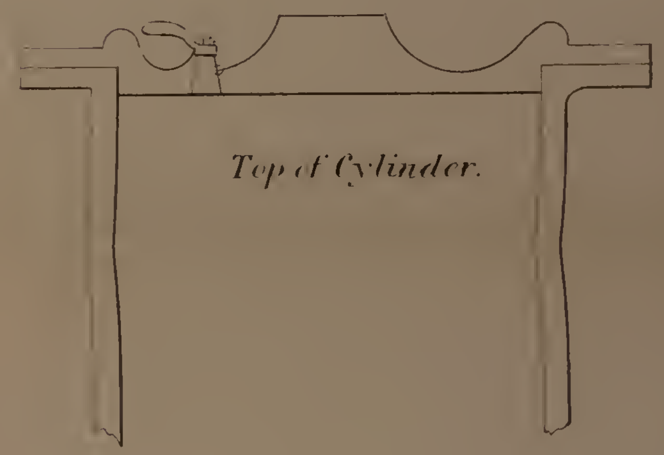


FIG. 7.

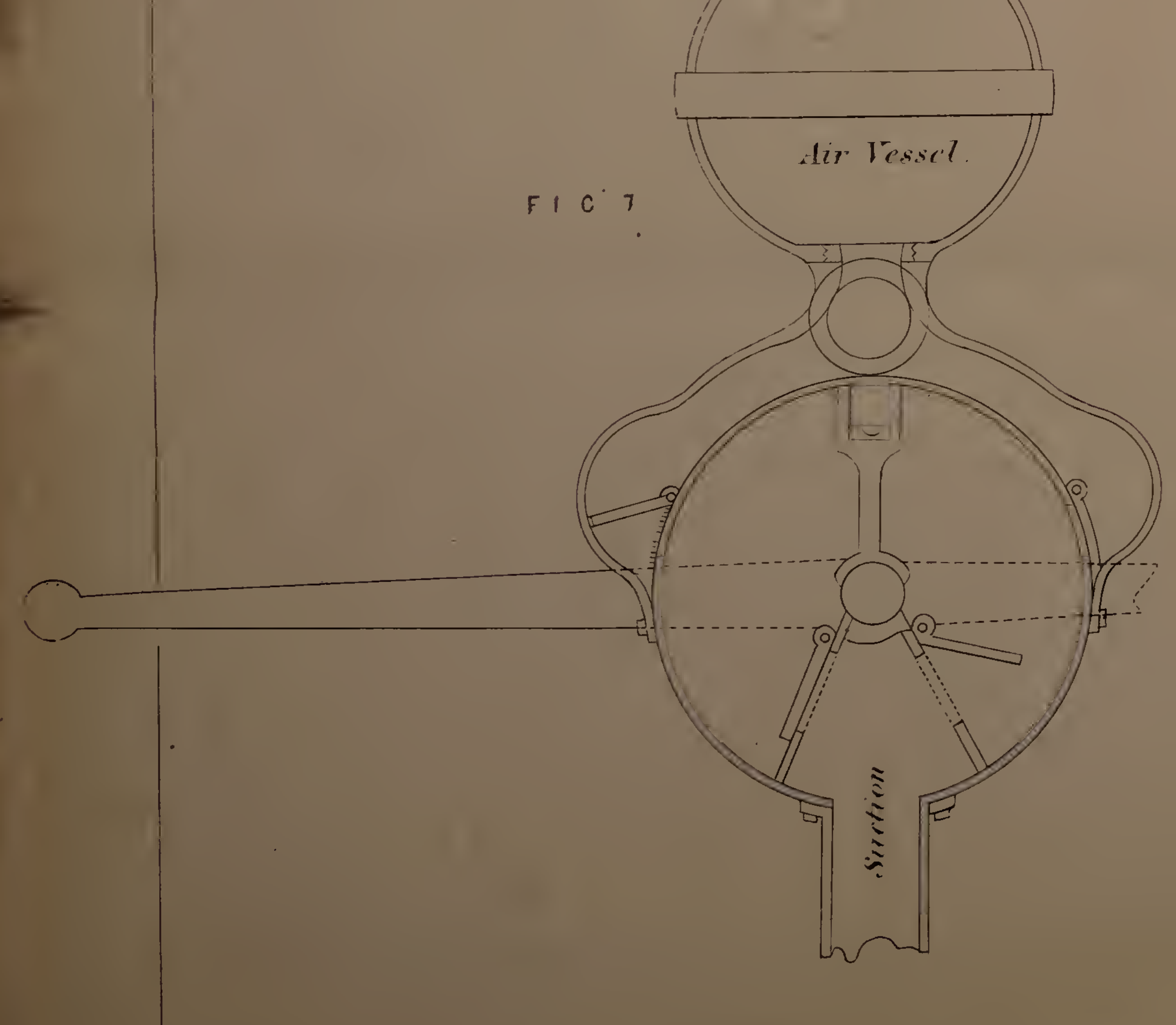


FIG. 8.

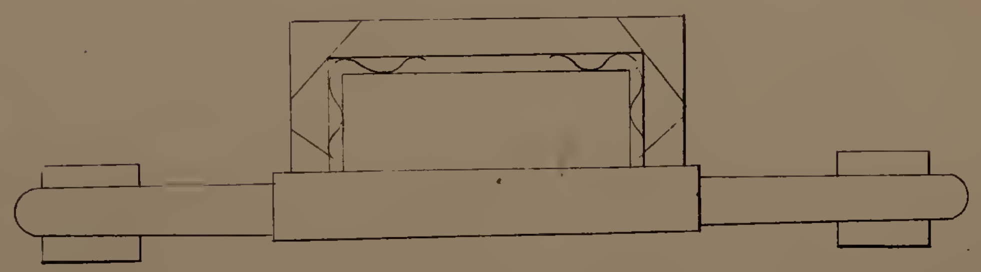


FIG. 9.

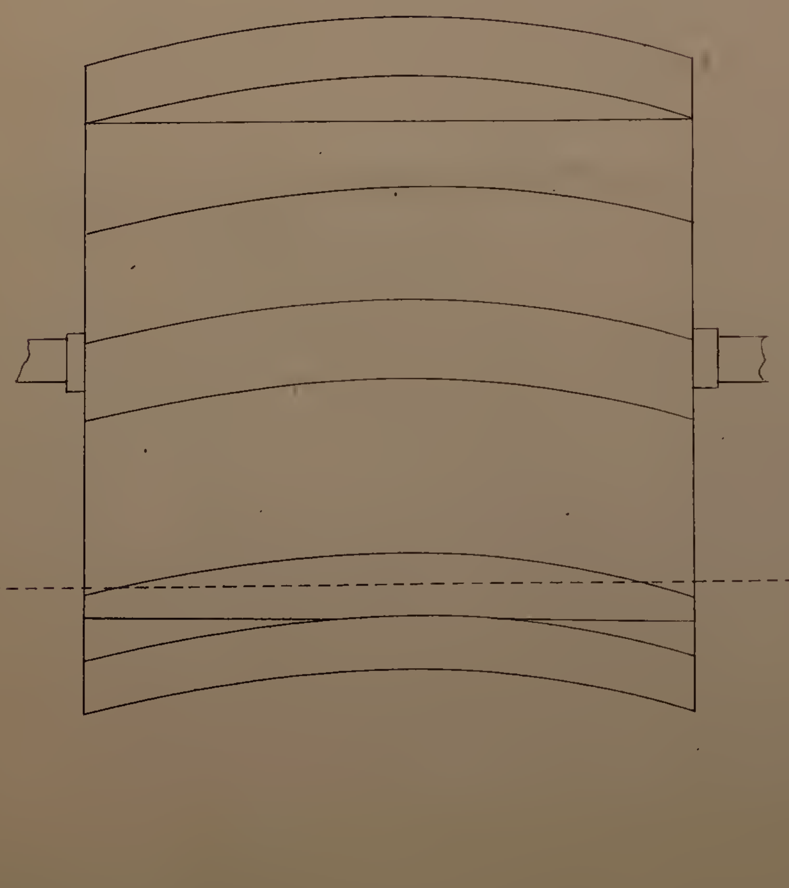
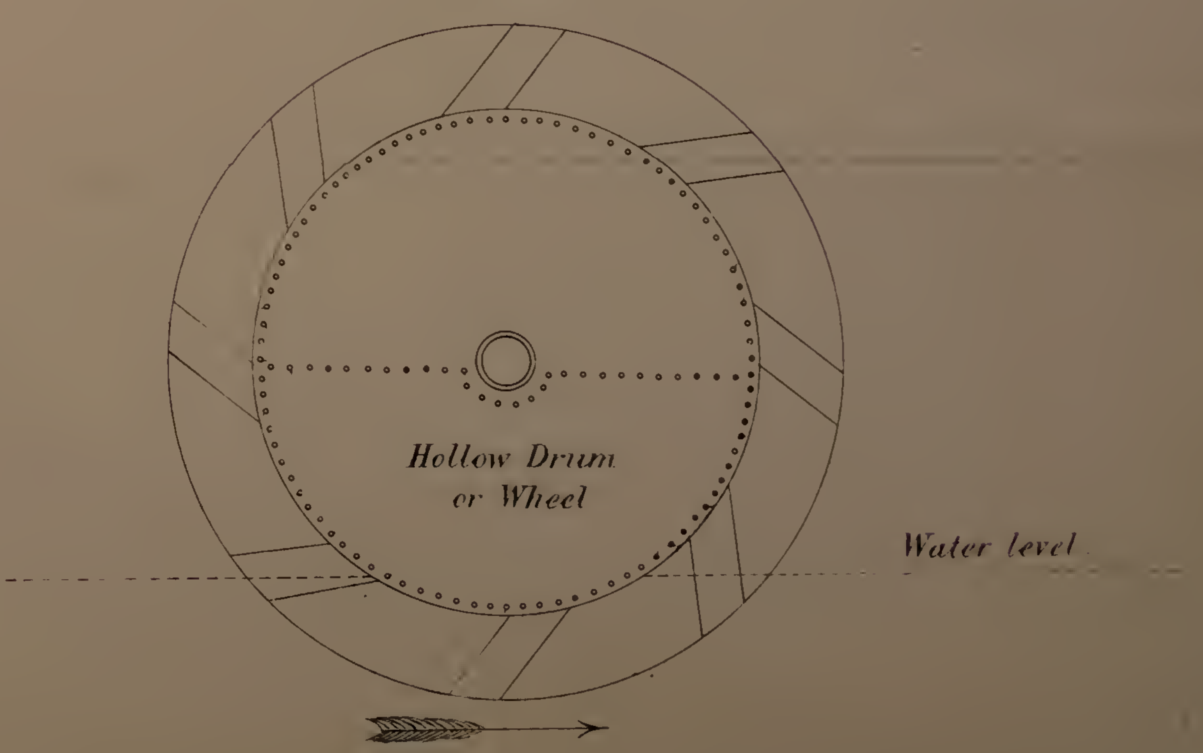


FIG. 10.



The enrolled drawing is partly colored.

Drawn on Stone by Malby & Sons

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or other purposes; it must be air-tight and buoyant, and its advantage is, that it has a tendency of keeping the proper depth in the water, so that the paddles act with the greatest effect. Fig. 10, an end view of ditto.

In witness whereof, I, the said John Barton, have hereunto set my hands and seal, this Fifteenth day of November, in the year of our Lord One thousand eight hundred and twenty.

JN^{O} (L.S.) BARTON.

AND BE IT REMEMBERED, that on the Fifteenth day of November, in the year of our Lord 1820, the aforesaid John Barton came before our said Lord the King in His Chancery, and acknowledged the Specification aforesaid, and all and everything therein contained and specified, in form above written. And also the Specification aforesaid was stamped according to the tenor of the Statute made for that purpose.

DOWDESWELL.

Inrolled the Fifteenth day of November, in the year of our Lord One thousand eight hundred and twenty.

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